

IN THE CLAIMS

1. (Previously presented) An electric vehicle, comprising:
one or more electric motors and/or generators,
wherein at least one motor and/or generator is an adaptive electric machine comprising two or more electromagnetic power circuits that have no electrical connection to each other and that provide power to the at least one or more motor and/or generator.

2. (Previously presented) The electric car or other electric vehicle of claim 1 which has an internal combustion engine, steam engine, or turbine engine connected to an electric generator and arranged in a series hybrid configuration with the one or more electric motors and/or generators.

3. (Previously presented) The electric car or other electric vehicle of claim 1 which has a fuel cell arranged in a series hybrid configuration with the one or more electric motors and/or generators.

4. (Previously presented) The electric car or other electric vehicle of claim 1 which has an internal combustion engine, steam engine, or turbine engine arranged in a series or parallel hybrid configuration with the one or more electric motors and/or generators.

5. (Previously presented) An electric car or other electric vehicle with one or more electric motors to move the vehicle,
wherein at least one motor is an adaptive electric machine comprising two or more electromagnetic power circuits that provide power to the at least one motor, and
the two or more electromagnetic circuits are sufficiently isolated to substantially eliminate electromagnetic and electrical interference between the circuits, and
where the torque/speed/efficiency characteristics of at least one electric motor can be dynamically adapted to varying torque, speed, acceleration, braking and other operating conditions of the vehicle to optimize vehicle performance.

6. (Original) The electric car or other electric vehicle of claim 5 which has an internal combustion engine, steam engine, or turbine engine arranged in a series or parallel hybrid configuration with the one or more electric motors.

7. (Original) The electric car or other electric vehicle of claim 5 which has an internal combustion engine, steam engine, or turbine engine connected to an electric generator arranged in a series hybrid configuration with the one or more electric motors.

8. (Previously presented) An electric car or other electric vehicle with an in-wheel electric motor in at least one wheel of the vehicle including vehicles with a motor at each wheel of the vehicle, each motor with its own motor controller and power electronics, wherein at least one motor is an adaptive electric machine comprising two or more electromagnetic power circuits that provide power to the at least one motor, and the two or more electromagnetic circuits are sufficiently isolated to substantially eliminate electromagnetic and electrical interference between the circuits.

9. (Original) The electric car or other vehicle of claim 8 with a separate battery for each motor.

10. (Original) The electric car or other electric vehicle of claim 8 with:
a separate battery for each electric motor,
a gasoline engine, steam engine, or turbine engine/generator module to produce electrical power to charge the batteries,
a user interface to get input from the driver of the vehicle, and
a central controller that controls operation of the motors, batteries, and gasoline engine, steam engine, or turbine engine/generator module.

11. (Previously presented) A method of propelling a car or other vehicle with one or more electric motors, the steps including:
periodically sensing one or more driver inputs, sensor inputs (for each motor system) and/or sensor inputs (for vehicle), and

allowing the torque/speed/efficiency characteristics of at least one motor to be dynamically adapted to changes in the one or more inputs and/or sensor inputs wherein the at least one motor is an adaptive electric machine comprising two or more electromagnetic power circuits that provide power to the at least one motor, and the two or more electromagnetic circuits are sufficiently isolated to substantially eliminate electromagnetic and electrical interference between the circuits.

12. (New) A system, comprising:

a series hybrid electric vehicle, the vehicle including one or more electric motors and/or generators, wherein at least one motor and/or generator is an adaptive electric machine comprising two or more electromagnetic power circuits that have no electrical connection to each other and that provide power to the at least one or more motor and/or generator.

13. (New) A system, comprising:

a series hybrid electric vehicle with one or more electric motors to move the vehicle, wherein at least one motor is an adaptive electric machine comprising two or more electromagnetic power circuits that provide power to the at least one motor, and the two or more electromagnetic circuits are sufficiently isolated to substantially eliminate electromagnetic and electrical interference between the circuits, and where the torque/speed/efficiency characteristics of at least one electric motor can be dynamically adapted to varying torque, speed, acceleration, braking and other operating conditions of the vehicle to optimize vehicle performance.

14. (New) A series hybrid electric vehicle with an in-wheel electric motor in at least one wheel of the vehicle, each motor with its own motor controller and power electronics, wherein at least one motor is an adaptive electric machine comprising two or more electromagnetic power circuits that provide power to the at least one motor, and the two or more electromagnetic circuits are sufficiently isolated to substantially eliminate electromagnetic and electrical interference between the circuits.

15. (New) A method of transportation, comprising:
propelling a series hybrid electric vehicle with one or more electric motors;
periodically sensing one or more driver inputs, sensor inputs and/or sensor inputs, and
allowing the torque/speed/efficiency characteristics of at least one motor to be
dynamically adapted to changes in the one or more inputs and/or sensor inputs wherein the at
least one motor is an adaptive electric machine comprising two or more electromagnetic power
circuits that provide power to the at least one motor, and the two or more electromagnetic
circuits are sufficiently isolated to substantially eliminate electromagnetic and electrical
interference between the circuits.